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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,199	03/10/2005	Hiroaki Sudo	L9289.05110	2887

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EXAMINER	
HERRERA, DIEGO D	
ART UNIT	**PAPER NUMBER**
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/527,199	SUDO, HIROAKI	
	Examiner	Art Unit	
	Diego Herrera	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Kotzin et al. (US 6173005).

Regarding claims 1, 10, 15, 18, and 19. Kotzin et al. discloses a CDMA transmitting apparatus (col. 1 lines: 10-13) comprising:

first and second spreading sections that perform spreading for signals different from each other (Kotzin teaches col. 6 lines: 28-35, spreading section different from each other);

first and second transmitting sections that correspond to the first and second spreading sections respectively and transmit the spread signals by radio (Kotzin teaches col. 5 lines: 16-43, radio communication traffic channel and data rate, col. 6 lines: 59-66); and

a spreading method setting section that sets spreading methods in the first and second spreading sections independently (Kotzin et al. teaches spreading methods and codes

for multiple antennas col. 13 lines: 41-42, 46-48).

Consider claim 2. The CDMA transmitting apparatus according to claim 1, wherein the spreading method setting section sets at least one of a spreading factor, the number of spreading codes, and the number of spreading codes assigned to one transmitting party, employed in the first spreading section, independent of the second spreading section (Kotzin et al. teaches at least one of spreading codes assigned col. 6 lines: 8-21).

Consider claim 3. The CDMA transmitting apparatus according to claim 1, wherein the spreading method setting section performs the setting based on at least one of a channel quality, a degree of importance, and the number of retransmissions, of each signal transmitted by radio from the first and second transmitting sections (Kotzin et al. teaches at least one of channel quality or transmission quality col. 14 lines: 21-38).

Consider claims 4 and 13. The CDMA transmitting apparatus according to claim 3, wherein the spreading method setting section sets in the first spreading section a spreading method that improves reception accuracy at a receiving side, in at least one of the following cases:
the channel quality of a signal transmitted by radio from the first transmitting section is poorer than the channel quality of a signal transmitted by radio from the second transmitting section (Kotzin et al. teaches at least one of the cases col. 5 lines: 44-63);

the degree of importance of the signal transmitted by radio from the first transmitting section is greater than the degree of importance of the signal transmitted by radio from the second transmitting section; and

the number of retransmissions of the signal transmitted by radio from the first transmitting section is greater than the number of retransmissions of the signal transmitted by radio from the second transmitting section.

Consider claim 5. The CDMA transmitting apparatus according to claim 4, wherein the spreading method setting section sets the spreading factor used in the first spreading section greater than the spreading factor used in the second spreading section (Kotzin et al. teaches spreading factor col. 5 lines: 44—col. 6 lines: 21).

Consider claim 6. The CDMA transmitting apparatus according to claim 4, wherein the spreading method setting section sets the number of spreading codes actually used in the first spreading section smaller than the number of spreading codes actually used in the second spreading section (Kotzin et al. teaches sections assign by matrix col. 5 lines: 44—col. 6 lines: 21).

Consider claims 7 and 12. The CDMA transmitting apparatus according to claim 4, wherein the spreading method setting section sets the number of spreading codes the first spreading section assigns to one transmitting party greater than the number of spreading codes the second spreading section assigns to one transmitting party (Kotzin

et al. teaches size block of data symbols is assign by the matrix of sequence and individually output from locations col. 5 lines: 44—col. 6 lines: 21).

.Consider claim 8. The CDMA transmitting apparatus according to claim 4, wherein, when the degree of importance of the signal transmitted by radio from the first transmitting section is greater than the degree of importance of the signal transmitted by radio from the second transmitting section, the signal transmitted by radio from the first transmitting section comprises control information or retransmission information (Kotzin et al. teaches spreading factor col. 5 lines: 44—col. 6 lines: 21).

Consider claim 9. The CDMA transmitting apparatus according to claim 4, wherein the setting is performed for only a fixed period of time (col. 15 lines: 58-61).

Consider claim 11. The CDMA transmitting apparatus according to claim 4, wherein transmission power of the first transmitting section is set greater than transmission power of the second transmitting section (Kotzin et al. teaches power levels between first and second transmissions col. 3 lines: 2-10).

Consider claim 14. The CDMA transmitting apparatus according to claim 1, wherein the signals transmitted by radio from the first and second transmitting sections are converted in multi-carrier form (Kotzin et al. teaches multi carrier or frequency channels

col. 11 lines: 61—col. 12 lines: 13).

Consider claim 16. A communication terminal apparatus comprising the CDMA transmitting apparatus of claim 1 (fig. 2, 106).

Consider claim 17. A base station apparatus comprising the CDMA transmitting apparatus of claim 1 (fig. 2, 103).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diego Herrera whose telephone number is (571) 272-0907. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Diego Herrera
Patent Examiner

LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER